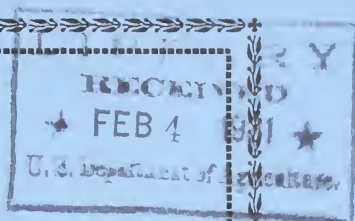


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1931



Glad Guide

*Describing a Few
Glad Beauties,
with
Comments*



Grown By
The Foss Heaton Glad Gardens
Creston, Iowa

1931

GLAD GUIDE

A treatise on the malady known as Gladitis, which is an incurable ailment. In the following pages the various symptoms are described, and numerous palliatives are suggested.



The Foss Heaton Glad Gardens
CRESTON, IOWA

The following descriptions of varieties are arranged by color classes. For alphabetical arrangement see price list.

Colors are described in two ways, the one in everyday language, and the other according to the Ridgway color charts, which are a series of eleven hundred color plates contained in a book called "Color Standards and Nomenclature," by Robert Ridgway, Washington, D. C.

The blooming dates are of necessity only approximations. They vary greatly according to the climate, the weather, the soil, the size of the bulb, and so forth. They are of value chiefly in comparing varieties with one another. Add a week or two for the more Northern latitudes.

WHITE AND BLOTCHED WHITE

ALBATROS

(Pfitzer) Mid-season, 75 days.

With the exception of Marie Kunderd it is the tallest white we have. Very stretchy, unlike most whites. The florets are very large and showy. The placement is exceptionally good, the spike heavy and strong, and holding up to the very tip. No trace of any other color, pure white in all kinds of weather. One of the best whites.

CARMEN SYLVA

(Decorah) Mid-season, 80 days.

A very popular pure white. Large bulbs will produce fine exhibition spikes. The petals not so rounded on the tips as some. Stiff, slender, tall spike, always straight. Does not stain or fleck as some whites do. Very dependable.

CORONADO

(Briggs) Mid-season, 85 days.

Ridgway: White, feather Dahlia Purple.

A big white, with a very large purple feather painted on lower petals, making a remarkable contrast. Heavily ruffled. Robust grower.

HENRY C. GOEHL

(Fischer) Mid-season, 85 days.

Ridgway: White, slightly shaded Rose Pink; blotch Pomegranate Purple.

A two-color Glad that is very attractive. The ground color is a good solid white, overlaid sometimes by a pink shading. The large red blotch is very striking. Fine form, nice tall spike.

MAMMOTH WHITE

(United Bulb Co.) Mid-season, 75 days.

Pure, glistening white, the buds and the lower petals on first opening being slightly creamy. The giant among Glads, a large number of enormous florets out at one time on a heavy spike. The petals are broad and rounded, the flowers wide open and nicely placed. This big satiny white is a revelation.

MARIE KUNDERD

(Kunderd) Early, 65 days.

A very popular snow white. Nicely ruffled. The petals are pointed as though they had been given a slight twist. An early, wide-open, large pure white of fine growing habits.

MISTLAND LASSIE

(Diener) Mid-season, 80 days.

Ridgway: White, flaked and shaded Rose Pink.

Nearly the whole of a tall spike out at one time. A variegated white that is unusually floriferous.

MRS. F. C. HORNBERGER

(Hornberger) Late, 90 days.

A strong growing pure white of splendid form and placement. Not so stretchy as other whites, but is a consistent winner at the shows. Good multiplier.

CREAM

TWILIGHT

(Kunderd) Late, 90 days.

Ridgway: Seashell Pink; feather Spinel Red, tipped with tints of Pinard Yellow.

A wonderful blending of a delicate pink and a creamy yellow. Extremely heavy growth, with many beautifully ruffled florets. A worth-while Glad, and distinctive.

YELLOW

GOLD EAGLE

(Mrs. Austin) Early, 65 days.

Ridgway: Pinard Yellow, rather deep, almost Empire Yellow.

A free-flowering, clear yellow, slightly ruffled. Well placed on a slender stem.

GOLDEN DREAM

(Groff) Late, 90 days.

Ridgway: Empire Yellow.

An extremely tall deep yellow self-color. The petals curl back like a rose. The form is beautiful, the color clear. The spike is very heavy and always straight, with a large number of flowers open. Prolific. The very best yellow to date.

GOLDEN FRILLS

(Kunderd) Early, 65 days.

Ridgway: Empire Yellow; feather Old Rose.

An unusually well-formed, wide open Prim, heavily ruffled. The deepest and brightest yellow in Glads, with a contrasting pink feather on lower petals. Tall, strong grower, and early.

K'S YELLOW WONDER

(Kunderd) Early, 65 days.

Ridgway: Pinard Yellow; Pale Lemon Yellow in throat.

An extremely tall light yellow. The florets are correctly arranged on a very graceful stem, that never crooks. A clear, clean attractive light yellow of good size.

P'S YELLOW WONDER

(Pfitzer) Late, 90 days.

Ridgway: Pinard Yellow.

The largest and best light yellow to date. The color is remarkably clear and bright, the flowers large and massive. Not so stretchy stem as other yellows, but the growth is sturdy.

RUFFLED GOLD

(Goodrich) Early, 75 days.

Ridgway: Straw Yellow; small feather Corinthian Pink.

A yellow that is different. A beautifully clear soft color. Most perfect form of any yellow Glad. Slightly ruffled, many out, and very prolific. A coming Glad, and one of the best.

SOUVENIR

(Jonkheer) Early, 65 days.

Ridgway: Empire Yellow.

The best yellow Prim. Used extensively for greenhouse forcing. A tall graceful stem and deep clear color.

LIGHT PINK

ANNIE LAURIE

(Brown) Mid-season, 85 days.

Ridgway: Geranium Pink to lighter.

Wide-open, ruffled, medium sized flowers on a splendid stem. A light pink.

BREAK O' DAY

(Glad Bill) Early, 60 days.

Ridgway: Light Geranium Pink, Barium Yellow throat.

Light pink, becoming deeper towards edges and tips of petals, and blending with the creamy throat. Vigorous growth, spikes slender and graceful.

CORYPHEE

(Pfitzer) Mid-season, 75 days.

Ridgway: La France Pink.

The only true La France Pink on the farm. Remarkable for its purity of color, truly as beautiful as an orchid. The pure white throat sets off the pure glistening pink to great advantage. The flower is wide open and large, on a very tall stem, that sometimes crooks, but certainly well worth while in spite of this fault.

GIANT NYMPH

(Coleman) Mid-season, 85 days.

Ridgway: Shrimp Pink, throat Naphthalene Yellow.

A vigorous light pink that never crooks. Heavy green foliage, very strong spike, and prolific. Big flowers on a big stem, and well placed.

MRS. FRANK PENDLETON

(Kunderd) Mid-season, 85 days.

Ridgway: Hermosa Pink, blotch Ox-blood Red.

An illustration of the fact that a really good Glad does not get out-of-date. Introduced in 1907, and still going strong. A bi-color of great charm, light pink with a blood red blotch.

MRS. H. E. BOTHIN

(Diener) Late, 95 days.

Ridgway: Shrimp Pink to lighter, blotch Scarlet.

A heavily ruffled light pink, shaded deeper, with a very large scarlet blotch, forming a beautiful contrast. Tall grower, vigorous spike, rather late.

MRS. P. W. SISSON

(Coleman) Mid-season, 85 days.

Ridgway: Shrimp Pink to deeper.

A clear, pure light pink of strong growth and heavy foliage, and fine form and placement. Outstanding in every way.

RITA BECK

(Fischer) Late, 90 days.

Ridgway: Shrimp Pink.

An exceptionally vigorous Glad. A clear live light pink of good substance and great size. Never crooks.

DARK PINK

BEAT ALL

(Alkemade) Mid-season, 85 days.

Ridgway: between La France Pink and Geranium Pink; small blotch Rose Doree.

A rich, mellow, tall-growing pink from Holland. Forms a massive bloom spike, with its large flowers and heavy spike.

CATHERINE COLEMAN

(Coleman) Late, 90 days.

Ridgway: Geranium Pink; feather Pomegranate Purple.

An outstanding Glad, and very popular. One of the very tallest, also very graceful. Perfect placement on a wiry stem. Color is a rich geranium pink, with a purple feather.

EVELYN KIRTLAND

(Mrs. Austin) Mid-season, 85 days.

Ridgway: Geranium Pink to lighter towards throat; blotch Scarlet Red.

An old favorite, but still useful. A mellow glistening geranium pink.

LOS ANGELES

(Houdyshell) Mid-season, 75 days.

Ridgway: deep Shrimp Pink; feather Scarlet Red.

The Glad that sends up several stems from large bulbs. Evidently has Prim blood. The color is a mellow, glistening shrimp pink. Useful for forcing.

MARSHALL FOCH

(Kunderd) Late, 90 days.

Ridgway: deep Shrimp Pink, variable; Scarlet Red feather markings in throat.

The massive florets are shaped somewhat like a huge rosette. The color is a rich melting glistening pink, deeper towards edges and tips of the petals. Of heavy substance and great size.

MAURICE FULD

(Gage) Late, 90 days.

Ridgway: Rose Doree, throat markings Carmine.

An exceptionally fine deep clear pink of great size. Stems always stiff and straight, and florets correctly placed. A clean-cut Glad.

MRS. LEON DOUGLAS

(Diener) Mid-season, 80 days.

Ridgway: Geranium Pink to Rose Doree.

A wonderful exhibition Glad. Very much in evidence at all the shows. The most in demand of the "Diener Big Three",—Phipps, Douglas, and Bennett,—which are probably the world's best Glads. Attains to great size under special culture. A real live pink.

MR. W. H. PHIPPS

(Diener) Late, 95 days.

Ridgway: light Geranium Pink. flaked Geranium Pink.

The big tall pink with almost the entire spike in bloom at once. Voted the best Glad everywhere. No other approaches it for gorgeousness. Often twelve to twenty big rich mellow pink flowers out at one time on an exceptionally heavy spike. Very fine under artificial light.

RICHARD DIENER

(Diener) Late, 95 days.

Ridgway: true Geranium Pink; throat Straw Yellow.

A clear live pink, blending with a creamy throat. Many out on a sturdy spike.

TYCKO ZANG

(Mrs. Austin) Late, 90 days.

Ridgway: Rose Doree, throat white.

Extremely large flower, with heavy foliage and strong growth. The pink is very deep, with a sort of bluish tinge. The spike is rather bunchy, like a Canna.

SALMON PINK

BETTY NUTHALL

(Salbach) Late, 90 days.

Ridgway: Flesh Color; throat Baryta Yellow, with central lines deep Flesh Color.

A very vigorous addition to the salmon pink class. Grows very tall, with heavy foliage and many buds to the spike. The color is an attractive blending of deep flesh pink with the creamy throat. A fine Glad.

GLORIANA

(Betscher) Early mid-season, 80 days.

Ridgway: Salmon Color, throat Pinard Yellow.

The Glad with the Golden Heart. A lovely Prim. Color is pure salmon, but the thing that makes this Glad beautiful is the wonderful blending of this salmon color with the beautiful golden throat. The buds just before the flower is open are as pretty as roses. From six to ten open at one time on a very tall slender stem.

SHEILA

(Coleman) Early, 70 days.

Ridgway: Strawberry Pink, throat markings Baryta Yellow.

A very tall graceful spike with three or four large flowers out at one time. The color is salmon pink blending with the creamy throat, which has slight pencilings.

ORANGE

HARBINGER

(Sanford) Early mid-season, 80 days.

Ridgway: Grenadine Red.

A very much improved Alice Tiplady, similar in many ways, but much larger. Color a little deeper.

LA PALOMA

(Dusinberre) Early, 70 days.

Ridgway: Mikado Orange.

This Glad, though a Prim, is the best orange color in Glads. It is just one shade removed from true orange color. The spike is very tall, slender and graceful, and always straight. Several very large florets open at one time.

ORANGE WONDER

(Kemp) Late, 95 days.

Ridgway: deep Grenadine.

A deep orange of very heavy foliage and vigorous growth and massive flowers. It is not a Prim, being the nearest approach to orange among the large flowered Glads. A very pleasing color, and among the very finest of all Glads. Blooms out splendidly as a cut flower.

SCARLET

AFLAME

(Hornberger) Early, 75 days.

Ridgway: Scarlet Red.

A vivid Prim. The flaming scarlet is softened somewhat by a sort of white powdering towards the edges of petals. A giant in size.

DR. F. E. BENNETT

(Diener) Early, 75 days.

Ridgway: Scarlet.

A true scarlet. A field of Bennets in full bloom looks like a prairie fire. One of the three or four finest Glads in existence. All Glads

have faults, but this one's faults are down almost to the irreducible minimum. The spike is very tall, stiff and straight, with many buds, and plenty of them in bloom at one time. Never fades nor wilts in the hottest sun or the driest weather. No flower bed without a Bennett.

PFITZER'S TRIUMPH

(Pfitzer) Mid-season, 85 days.

Ridgway: Scarlet; throat blotch deeper Scarlet.

The sensational new scarlet from Germany. Of great size, with wide-open, broad-faced florets and exceedingly broad petals. Beautiful, rich, gorgeous. Only three out at one time, but these three make up in size for any lack in numbers. Does not like hot and dry weather.

RED

CRIMSON GLOW

(Betscher) Mid-season, 80 days.

Ridgway: Nopal Red.

A fine crimson, and very popular. A glistening wide-open real red that is very dependable.

RED FIRE

(Kunderd) Mid-season, 80 days.

Ridgway: vivid Nopal Red.

The finest of the reds, and the reddest of all red Glads. Self-color, large, wide-open, much flatter than other reds, and very tall and stretchy, which is an unusual trait in the reds.

RED GLORY

(Ellis) Mid-season, 75 days.

Ridgway: Deep Carmine, shaded Black.

A sport of Purple Glory, and very similar in every way except the color, which is a rich red with black shadings. Thick leathery petals, heavily ruffled, vigorous spike and foliage, and a rich bright color. The bulblets give a perfect sprout and are of jumbo size.

SCARLET WONDER

(Cowee) Mid-season, 85 days.

Ridgway: Scarlet Red.

The largest florets by far of all the reds. A red that is red, glistening and bright. Of strong growth, rather compact, with two or three open. Short white line on lower petals. A good one.

DARK RED

ARABIA

(Hinkle) Early, 70 days.

Ridgway: Bordeaux, shaded and flaked Black.

The black one. Of course, not completely black, but a very dark red. The buds are black, and the flower appears black at a distance in the field. Glossy like velvet. A vigorous grower with flowers of good size.

JOHN T. PIRIE

(Kunderd) Mid-season, 85 days.

Ridgway: Neutral Red to lighter throat, blotch Carmine, bordered Barium Yellow.

Very odd. Best described as a mahogany brown, with a large diamond-shaped red blotch bordered cream on the lower petals that lights up the flower. Splendid keeper as a cut flower, never fading. The spike is very tall.

MAROCCO

(Pfitzer) Mid-season, 80 days.

Ridgway: deep Burnt Lake, flaked Black.

SUPERIOR GLADIOLI

A dark one from Europe. Darker than Arabia, which is saying a good bit. The florets are wide-open, of good size, on very tall slender stems, and many out at one time.

THOS. A. EDISON

(Kunderd) Mid-season, 80 days.

Ridgway: Garnet Brown.

A beautifully ruffled Glad. The flowers are wide open and well placed on a slender stem, and are of average size. But the color is unusual, a real garnet. Very distinctive.

ROSE

CRINKLES

(Kunderd) Mid-season, 80 days.

Ridgway: Tyrian Rose to lighter towards throat.

Extremely ruffled, almost crinkled. A large number of medium sized flowers on a sturdy spike. Color a deep rose pink. Attracts lots of attention. The florets resemble a carnation.

D'S AMERICAN BEAUTY

(Diener) Mid-season, 85 days.

Ridgway: Tyrian Rose; blotch Barium Yellow.

Almost the entire spike out at one time. Color a deep rose, with a cream blotch. Does not get tall.

DR. NELSON SHOOK

(Kunderd) Late, 90 days.

Ridgway: deep Rose Red to Pomegranate Purple towards tips of petals and the small feather blotch.

A splendid creation, and one of Mr. Kunderd's finest. A vivid deep rose-red. The spike is extremely heavy, always straight, with many out at one time. In great demand. The best rose-red.

EMILE AUBRUN

(Lemoine) Late, 90 days.

Ridgway: Begonia Rose, buds Spectrum Red; blotch Rose Red.

An unusual Glad. Large florets perfectly placed, with broad flaring petals, and many out at one time on a tall sturdy spike. The color is rose to red, having a peculiar, almost bronzy sheen.

PRIDE OF WANAKAH

(Criswell) Mid-season, 80 days.

Ridgway: Tyrian Rose to lighter, blotch deeper.

An extremely tall Glad, with straight wiry stems. The color is a vivid deep rose, with an attractive blotch. Exceedingly large and wide-open blooms.

ROSE ASH

(Diener) Late, 90 days.

Ridgway: Rocellin Purple; blotch Straw Yellow.

A peculiar shade of old rose, with a creamy blotch. Very decorative where rich shades predominate. Flowers arranged around the stem somewhat. The spike is very heavy and tall. Very popular.

ROSE PINK

E. J. SHAYLOR

(Kunderd) Early, 70 days.

Ridgway: light Rose Red, lighter towards throat; feather deeper.

A very popular deep rose pink. Attractively ruffled, pleasing color, stretchy spike, fine growing habits, and early.

HIGHLAND LADDIE

(Kunderd) Mid-season, 85 days.

Ridgway: Tyrian Rose to lighter in throat; blotch deeper.

A decidedly beautiful rose pink of large size. Massive spike and flowers. The deep shading on a light background is unusually attractive. A vivid Glad, and well named.

PAULINE KUNDERD

(Kunderd) Mid-season, 85 days.

Ridgway: Rose Pink, deepening towards edges of petals; large blotch and throat Baryta Yellow, with band of Pinard Yellow through the center, and white band in upper petals.

A beautifully dainty rose pink, with creamy throat and yellow bands. Somewhat like Mrs. Dr. Norton, but much more beautifully clear, and fine in every way. Will stand the heat and heavy soil. Mr. Kunderd's favorite. Certainly a beautiful Glad.

SWEET ROSE

(Kunderd) Early, 75 days.

Ridgway: Begonia Rose; blotch Pomegranate Purple.

A wonderful rose pink, with a beautiful throat blotch. A splendid placement of large round florets on a tall stiff straight stem. The petal edges all fold back, the broad face of the flower having a wide-open appearance. One of the best.

LAVENDER

BERTY SNOW

(Mair) Mid-season, 80 days.

Ridgway: Pale Rosolane Purple to lighter.

The sensational new lavender from Scotland. An intense clear color, with lighter bands through some of the petals. The heart of the flower is much deeper and more intense. This all applies only when the flower comes clear, as it usually does. Only a few were streaked this season. The florets are of beautiful form, and many out, nicely arranged on a sturdy spike.

CAPT. BOYNTON

(Boynton) Mid-season, 80 days.

Ridgway: Mallow Pink to light Mallow Purple towards the edges and tips of the petals, almost Mallow Purple, and often flaked Mallow Purple; throat markings Aster Purple.

A very pleasing lavender pink on a white ground, becoming deeper towards the edges of the petals, as though they were dripping a pinkish stain. Extremely tall, well-opened, and large.

DR. MOODY

(Mrs. Kinyon) Mid-season, 80 days.

Ridgway: Pale Amaranth Pink.

A pleasing lavender pink of very fine growing habits. The color is of a bluer tone than Minuet, the spike not quite so tall, but more out at one time, and the bulblets sprout much more readily. A fine Glad.

JANE ADDAMS

(Decorah) Mid-season, 85 days.

Ridgway: Rosolane Pink to deeper, buds deeper; blotch Naphthalene Yellow.

Jane Addams and Mr. W. H. Phipps are the two most popular Glads with the visitors to our farm. The hotter and drier the weather the more beautiful it becomes, it seems. It flaked but very little this season. When it comes clear, no purer, finer lavender pink to be found. Not a pale lavender, but a live, glowing, vivid thing, just as fine the second week after being cut. Far surpasses other Glads as a cut flower, not fading at all, and just as large at the tip as at the bottom of the spike. Enormous wide-open flowers on a stiff slender spike. A great Glad.

JUBILEE

(Kemp) Late, 90 days.

Ridgway: Cameo Pink, shaded and flaked deeper, almost Thulite Pink.

A giant Glad, with long wavy petals. The color is a lavender pink of a dull bluish tone, flaked and streaked deeper. Several open on a giant spike.

MINUET

(Coleman) Late, 90 days.

Ridgway: Pale Rose Purple.

The peerless lavender pink. Can always depend on a tall vigorous spike and a large clear flower in all kinds of weather. Perfect placement and beautiful color. Among the very finest in any color. But the bulblets are hard to sprout.

MRS. F. C. PETERS

(Fischer) Late, 90 days.

Ridgway: Pale Rosolane Purple; blotch Amaranth Purple.

One of the finest. Very tall graceful spike, with several beautiful florets of a lovely rose-lilac color, with a wonderful dark blotch on a lower petal that usually appears but once on each flower. Fine in every way.

ROYAL LAVENDER

(Schleider) Late, 90 days.

Ridgway: Mallow Purple.

A vivid phlox color, or deep lavender pink, with a feather of deeper color. A large, wide-open, gorgeous flower on a vigorous tall plant. Remarkable for its vivid color, a new lavender pink of great promise.

PURPLE

AIDA

(Pfitzer) Early, 70 days.

Ridgway: Manganese violet; blotch Aster Purple.

An early deep violet Glad that is unusual. The large vivid purple blotch is quite a contrast with the blue background.

DUCHESS OF YORK

(Velthuys) Mid-season, 80 days.

Ridgway: Pansy Purple, blotch Cotinga Purple.

A deep blue purple of medium size, but very long slender graceful stems.

HENRY FORD

(Diener) Late, 90 days.

Ridgway: Rhodamine Purple, blotch deep Amaranth Purple.

A vivid red-purple that everybody likes. The placement is irregular, but there are many blooms on a vigorous spike. Wins consistently in the purple class at the shows in spite of this fault, simply because of its gorgeousness and vivid color.

PAUL PFITZER

(Pfitzer) Early, 70 days.

Ridgway: bright Amaranth Purple.

A bright dazzling red-purple, self-color. Even in the hottest and driest weather, not the slightest trace of any of the dull tones sometimes seen in the purples. The intensity of color is enhanced by the slightly deepening color towards the edges and tips of the petals. The florets are very large, the petals broad, not too flat, but very artistically formed. A splendid cut flower, blooming out well and not fading. A very tall sturdy spike that never crooks. Decidedly one of the richest. Plenty of jumbo bulblets that grow.

PURPLE QUEEN

(Kunderd) Mid-season, 80 days.

Ridgway: Aster Purple.

A fine rich purple of the same color as the purple aster, perhaps deeper. The flower is larger, the spike tall. Ruffled, strong growth, fairly early, and good as a cut flower.

BLUE

GERALDINE FARRAR

(Diener) Mid-season, 80 days.

Ridgway: deep Lavender; feather Livid Purple.

The true lavender Glad. Gaining rapidly in popular esteem. Grows very tall, flowers are large and wide open, and several open at one time. Be sparing with fertilizer on this Glad.

GERTRUDE PFITZER

(Pfitzer) Mid-season, 75 days.

Ridgway: Pale Lobelia Violet; blotch Hortense Violet with central feather True Purple.

One of the best of the violets. As strong as Veilchenblau, even taller in growth. The color is a pleasing light blue that never fades. A fine addition to the blue Glads.

HEAVENLY BLUE

(Pfitzer) Mid-season, 85 days.

Ridgway: Pale Bluish Lavender, shaded Light Lobelia Violet; feather Aster Purple.

Unlike most so-called blues, the colors in this one are remarkably clear and pure. Although rather pale, it is probably the nearest blue we have. The florets are large, of splendid form, many out at one time, and well placed on a tall stiff stem. Fades after it is cut, but not in the field. A beauty.

MARMORA

(Errey) Mid-season, 80 days.

Ridgway: light Vinaceous Lilac; blotch deep Purplish Vinaceous in the throat to Spinel Red on the tip.

A slate blue of remarkable size and vigor. Comes from Australia, and is a new color in Glads. A sport of Emile Aubrun, but much larger and stronger. The spike is very tall, and the giant flaring florets are gracefully arranged, and most of them out at one time. Consistent winner in the "any other color" class at all the shows.

VEILCHENBLAU

(Pfitzer) Mid-season, 80 days.

Ridgway: Hyssop Violet to deeper, often shaded on back of petals a Manganese Violet; blotch Pansy Purple.

The Iris-colored Glad. This "blue" is as strong a grower as any Glad, with flowers just as large in size and regular in shape. Heavy dark green foliage and fine tall spike. Deep bluish violet with a purple blotch.

STANDARD SIZES FOR GRADING BULBS

No. 1: 1½ inches and up in diameter. No. 2: 1¼ to 1½ inches. No. 3: 1 to 1¼ inches. No. 4: ¾ to 1 inch. No. 5: ½ to ¾ inch. No. 6: ½ inch and under.

SUPERIOR GLADIOLI

1931 PRICE LIST

This list cancels all other price lists mailed to you.

My twenty-two acres of Glads were grown at the new location near Creston, Iowa, with the same kind of soil as at Shannon City, the old location, a black clay loam containing all the elements of plant food needed for the natural development of the bulb, with no sand, no irrigation, and no fertilizers. This part of Iowa received enough rainfall to keep the Glads growing, although it was hot, assuring a nice crop of peppy bulbs, which are unusually high crowned.

My new hollow-tile bulb house, 80 feet by 32 feet and full cement basement, assures the proper care of the crop of bulbs.

Practically all sizes of bulbs were sold out last season above No. 6 size, except in a few rare varieties, resulting in a crop of bulbs that are young and vigorous. All bulbs disease-free.

Corrosive sublimate and new ground are always used for every bulb. All bulbs offered for sale are grown by me.

Every bulb must prove true. Should mistakes occur, tell me before you tell your neighbor. I want satisfied customers.

All shipments prepaid.

I will not make substitutions of size or variety contrary to your wishes.

Where no delivery date is specified, I will fill orders in rotation as far as possible in March. I try to avoid cold weather.

Terms: Cash with order. A deposit of 25 percent will hold your bulbs for you for later delivery. Please specify if you wish C. O. D. delivery. All offers made subject to prior sale. 6 at dozen rate, 25 at 100 rate, 1000 at 9 times 100 rate, 250 at 1000 rate.

If your order is less than \$1.00, add 20c extra for postage.

Special quotations on request. On orders of \$5.00 to \$15.00 five percent discount in cash or extra bulbs. \$15.00 or over, 10 percent.

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets
Aflame	Each	\$.35	\$.30	\$.25	\$	\$	\$	20 \$.15
(scarlet)	Doz.	3.50	3.00	2.50				100 .50
Aida	Each	.50	.40	.30				
(purple)								
Albatros	Each	.75	.60	.50				
(white)								
Annie Laurie	Each		.10	.08	.06			100 .25
(light pink)	Doz.		1.00	.80	.60			
Arabia	Each	.05						100 .15
(dark red)	Doz.	.50	.35	.30	.20	.15		1000 .50
	100	2.50	2.00	1.50	1.00	.70	.50	1 qt. 2.00
Beat All	Each	2.50	2.00	1.50	1.00	.75	.50	Each .25
(dark pink)								12 2.50
Berty Snow	Each					.25	.20	
(lavender)	Doz.					2.50	2.00	
Betty Nuthall								12 .25
(salmon pink)								100 1.50
Break O' Day	Each	.05						100 .15
(light pink)	Doz.	.50	.35	.30	.20	.15		1000 .50
	100	2.50	2.00	1.50	1.00	.70	.50	1 qt. 1.00
Capt. Boynton	Each		.05					100 .15
(lavender)	Doz.		.50	.40	.30	.20	.15	1000 .75
	100		3.00	2.00	1.50	1.00	.80	
Carmen Sylva	Each		.05					100 .15
(white)	Doz.		.40	.30	.20	.15		1000 .75
	100		2.50	2.00	1.50	1.00	.80	

THE FOSS HEATON GLAD GARDENS, CRESTON, IOWA

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets	
Catherine Coleman (dark pink)	Each	.15	.10	.08	.06	.05			
	Doz.	1.50	1.00	.80	.60	.50	.40		
	100		6.50	5.00	4.00	3.00	2.00		
Coronado (white)	Each	1.00	.80	.60					
Coryphee (light pink)	Each	1.00	.80	.60	.40	.30	.20	12	.50
	Doz.	10.00	8.00	6.00	4.00	3.00	2.00	100	4.00
Crimson Glow (red)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	.75
	100		2.00	1.50	1.00	.70	.50		
Crinkles (rose)	Each	.06	.05					100	.15
	Doz.	.60	.50	.40	.30	.20	.15	1000	1.00
	100		3.50	2.50	1.50	1.00	.80		
D's American Beauty (rose)	Each	.05						100	.15
	Doz.	.50	.35	.30				1000	.50
	100	2.50	2.00	1.50					
Dr. F. E. Bennett (scarlet)	Each	.07	.06	.05				100	.25
	Doz.	.70	.60	.50	.30	.20	.15	1000	2.00
	100	4.50	3.50	2.50	2.00	1.50	1.00		
Dr. Moody (lavender)	Each	.30	.25	.20	.15	.10	.08	12	.15
	Doz.	3.00	2.50	2.00	1.50	1.00	.80	100	.80
Dr. Nelson Shook (rose)	Each	.15	.12	.10	.08	.05		100	.30
	Doz.	1.50	1.20	1.00	.80	.50	.30		
	100				5.00	3.50	2.00		
Duchess of York (purple)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	1.00
	100	3.00	2.50	2.00	1.00	.70	.50		
E. J. Shaylor (rose pink)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	.80
	100	2.50	2.00	1.50	1.00	.70	.50		
Emile Aubrun (rose)	Each		.10	.08	.06			100	.25
	Doz.		1.00	.80	.60			1000	1.50
	100		8.00	6.00					
Evelyn Kirtland (dark pink)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	.50
	100		2.00	1.50	1.00	.70	.50		
Geraldine Farrar (blue)	Each		.12	.10	.08	.06			
	Doz.		1.20	1.00	.80	.60			
Gertrude Pfitzer (blue)	Each	1.25	1.00	.80				Each	.10
								12	1.00
Giant Nymph (light pink)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	.50
	100	2.50	2.00	1.50	1.00	.70	.50		
Gloriana (salmon pink)	Each	.07	.06	.05				100	.20
	Doz.	.70	.60	.50	.30	.20	.15	1000	1.50
	100	5.00	4.00	3.00	2.00	1.50	1.00		
Gold Eagle (yellow)	Each	.08	.06	.05				100	.35
	Doz.	.80	.60	.50	.30	.20	.15	1000	3.00
	100	6.00	4.00	3.00	2.00	1.50	1.00		
Golden Dream (yellow)	Each	.12	.10	.08	.06	.05		100	.30
	Doz.	1.20	1.00	.80	.60	.50	.30	1000	2.50
	100		7.00	5.00	4.00	3.00	2.00		
Golden Frills (yellow)	Each	.06	.05					100	.15
	Doz.	.60	.50	.35	.30	.20	.15	1000	1.00
	100	4.00	3.00	2.00	1.50	1.00	.80		
Harbinger (orange)	Each					.05			
	Doz.					.30	.20		

SUPERIOR GLADIOLI

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets	
Heavenly Blue	Each	.25	.20	.15	.10				
(blue)	Doz.	2.50	2.00	1.50	1.00				
Henry C. Goehl	Each	.08	.06					100	.20
(white)	Doz.	.80	.60						
Henry Ford	Each	.05						100	.15
(purple)	Doz.	.50	.35	.30	.20	.15		1000	.15
	100	2.50	2.00	1.50	1.00	.70	.50	1 qt.	1.00
Highland Laddie	Each	.06	.05					100	.15
(rose pink)	Doz.	.60	.50	.35	.25	.20	.15	1000	.80
	100	4.00	3.00	2.00	1.50	1.00	.80		
Jane Addams	Each	.20	.15	.12	.10	.07	.05	12	.15
(lavender)	Doz.	2.00	1.50	1.20	1.00	.70	.50	100	.60
	100	12.00	10.00	8.00	6.00	5.00	4.00	1000	5.00
John T. Pirie	Each	.05						100	.15
(dark red)	Doz.	.50	.35	.25	.20	.15		1000	.50
	100	3.50	2.50	2.00	1.50	1.00	.70		
Jubilee	Each	2.50	1.50	1.00				Each	.10
(lavender)								12	1.00
K's Yellow	Each	.05						100	.15
Wonder	Doz.	.50	.35	.25	.20	.15		1000	.50
(yellow)	100	3.50	2.50	2.00	1.50	1.00	.70		
La Paloma	Each	1.25	1.00					Each	.15
(orange)								12	1.50
Los Angeles	Each		.05					100	.15
(dark pink)	Doz.		.50	.30	.20	.15		1000	.50
	100		2.00	1.50	1.00	.70	.50		
Mammoth White	Each	1.25	1.00						
(white)									
Marie Kunderd	Each	.05						100	.15
(white)	Doz.	.50	.35	.25	.20	.15		1000	.80
	100	3.00	2.50	2.00	1.00	.70	.50		
Marmora	Each	.50	.40	.30	.20	.15	.10	12	.15
(blue)	Doz.	5.00	4.00	3.00	2.00	1.50	1.00	100	.50
Marocco	Each		.80	.60	.50	.40	.30	Each	.05
(dark red)	Doz.		8.00	6.00	5.00	4.00	3.00	12	.50
Marshall Foch	Each	.05						100	.15
(dark pink)	Doz.	.50	.35	.30	.25	.20	.15	1000	.80
	100	2.50	2.00	1.50	1.00	.70	.50		
Maurice Fuld	Each	.15	.10	.08	.06	.05			
(dark pink)	Doz.	1.50	1.00	.80	.60	.50			
Mistland Lassie	Each	.40	.30	.20				12	.40
(white)									
Minuet	Each						.10		
(lavender)	Doz.						1.00		
Mrs. Frank	Each	.05						100	.15
Pendleton	Doz.	.50	.35	.30	.25	.20	.15	1000	.50
(light pink)	100		2.00	1.50	1.00	.70	.50		
Mrs. H. E.	Each	.05						100	.15
Bothin	Doz.	.50	.35	.30	.25	.20	.15	1000	.50
(light pink)	100	2.50	2.00	1.50	1.00	.70	.50		
Mrs. Leon	Each	.06	.05					100	.15
Douglas	Doz.	.60	.50	.40	.30	.20	.15	1000	1.00
(dark pink)	100	4.00	3.00	2.00	1.50	1.00	.70		
Mrs. F. C.	Each	.12	.10	.08					
Hornberger	Doz.	1.20	1.00	.80					
(white)									

The Foss Heaton Glad Gardens, Creston, Iowa

Amount inclosed, \$ _____

Street _____ P. O. Box _____

County _____ Express Office _____

Date of Order _____ 19____

Please write name and address plainly. If we are sold out of an item, shall we substitute nearest sizes? _____

[illegible]

(Orders may be continued on the back of this sheet)

THE FOSS HEATON GLAD GARDENS, CRESTON, IOWA

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets	
Mrs. F. C. Peters (lavender)	Each	.06	.05					100	.15
	Doz.	.60	.50	.35	.25	.20	.15	1000	.50
	100	3.50	2.50	2.00	1.50	1.00	.70		
Mrs. P. W. Sisson (light pink)	Each	.10	.08	.06	.05			100	.15
	Doz.	1.00	.80	.60	.50				
Mr. W. H. Phipps (dark pink)	Each	.07	.06	.05				100	.15
	Doz.	.70	.60	.50	.30	.20	.15	1000	1.00
	100	5.00	4.00	3.00	2.00	1.50	.80		
Orange Wonder (orange)	Each	.50	.40	.30	.25	.20	.15	12	.30
	Doz.	5.00	4.00	3.00	2.50	2.00	1.50	100	2.00
Paul Pfitzer (purple)	Each	.25	.20	.15	.12	.10		12	.25
	Doz.	2.50	2.00	1.50	1.20	1.00		100	2.00
Pauline Kunderd (rose pink)	Each	2.50	2.00						
Pfitzer's Triumph (scarlet)	Each		.30	.25	.20	.10	.08	12	.25
	Doz.		3.00	2.50	2.00	1.00	.80	100	1.50
Pride of Wanakah (rose)	Each		.06	.05				100	.15
	Doz.		.60	.50	.40				
P's Yellow Wonder (yellow)	Each	.50	.40	.30	.20			12	.25
	Doz.	5.00	4.00	3.00	2.00				
Purple Queen (purple)	Each	.15	.12	.10	.08	.05		100	.35
	Doz.	1.50	1.20	1.00	.80	.50	.40		
Red Fire (red)	Each	.08	.06	.05				100	.15
	Doz.	.80	.60	.50					
Red Glory (red)	Each	.30	.25	.20	.15	.10		12	.15
	Doz.	3.00	2.50	2.00	1.50	1.00			
Richard Diener (dark pink)	Each		.05					100	.15
	Doz.		.50	.40	.30				
Rita Beck (light pink)	Each						.10	12	
	Doz.						1.00		
Rose Ash (rose)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	.50
	100		2.00	1.50	1.00	.70	.50		
Royal Lavender (lavender)	Each	.50	.40						
Ruffled Gold (yellow)	Each	.50	.40	.30	.20	.15	.10	12	.20
	Doz.	5.00	4.00	3.00	2.00	1.50	1.00	100	1.00
	100			20.00	15.00	10.00	6.00		
Scarlet Wonder (red)	Each	.06	.05					100	.15
	Doz.	.60	.50			.20	.15		
	100					1.00	.80		
Sheila (salmon pink)	Each			.05				100	.15
	Doz.			.30	.20	.15			
	100			1.50	1.00	.70	.50		
Souvenir (yellow)	Each		.05					100	.15
	Doz.		.35	.30	.20	.15		1000	.50
	100		2.00	1.50	1.00	.70	.50		
Sweet Rose (rose pink)	Each		.06	.05				100	.15
	Doz.		.60	.50	.35	.25	.15	1000	1.00
	100		4.00	3.00	2.00	1.50	1.00		
Thos A. Edison (dark red)	Each	3.00	2.50	2.00					

SUPERIOR GLADIOLI

		No. 1	No. 2	No. 3	No. 4	No. 5	No. 6	Bulblets	
Twilight (cream)	Each	.05						100	.15
	Doz.	.50	.40	.30	.25	.20	.15		
	100			2.00	1.50	1.00	.80		
Tycko Zang (dark pink)	Each	.05						100	.15
	Doz.	.50	.35	.30	.20	.15		1000	.50
	100		2.00	1.50	1.00	.70	.50		
Veilchenblau (blue)	Each		.20					12	.15
	Doz.		2.00					100	1.00

SEEDLING MIXTURE

I have tens of thousands of seedlings that I just cannot bear to throw away. They bloomed this year and last year, and have not been propagated except by division of the bulb, and consequently hardly any two will be alike. I can truly say that they are as good as many named varieties, and also that you will find some of them better. They are from carefully selected crosses. The hundred or so I have selected from them for further trial are carefully pedigreed. I cannot, of course, keep them all, and if you find a superior variety, I shall be glad if you can save it to the world, and maybe introduce it yourself. If the world can obtain a fine new variety, what difference does it make where it comes from?

From this bunch of seedlings I selected a few nice ones which I am propagating. One is an orange-pink, a beautifully clear color and fine keeper, big and tall. Another is a black one bigger and taller than Purple Glory, and as black as Morocco. Another is a rich pure cream with eight to ten big wide-open blooms. Another is a big tall blue that does not fade, and was far superior to my Blue Triumphator this season.

All colors you can think of, but a large proportion of orange, pink, and cream, with the majority a peculiar phlox-purple, also plenty of yellows, and some blues.

No. 1 bulbs only, and not less than 25 will be sold. Price 4c each, \$4.00 per 100, \$40.00 per 1000, prepaid.

SUPERIOR MIXTURE

What I throw over the fence is not found here. These are all named varieties, mixed at the time I ship them to you, but not labeled. Following colors guaranteed: pink, white, red, dark red, yellow, lavender, purple, blotched, blue and smoky, the proportions depending on our surplus.

Medium sizes, No. 3 and No. 4, \$1.10 per 100 prepaid.

Large sizes, No. 2 and over, \$2.20 per 100 prepaid.

1930 WINNINGS AT A. G. S. SHOW, DES MOINES

- (1) Society's Cup.
- (2) A. G. S. Silver Medal.
- (3) Iowa Special Cup.
- (4) One Honorable Mention and numerous ribbons.
- (5) Best seedling display.

The best place to learn what is going on in the Glad world is the *Gladiolus Review*, a monthly magazine devoted exclusively to Glads. It is published by the American Gladiolus Society at Goshen, Indiana. Send your dues of \$2.00 to the secretary, Mr. Roscoe Huff.

A splendid magazine devoted to flowers and philosophy is *The Flower Grower*, published by Madison Cooper, Calcium, New York.

WHAT ABOUT SIZES?

The value of a bulb varies according to its size. The smallest sizes are not always certain of blooming, although this varies greatly according to the climate and season as well as the variety itself. Many people claim that the medium sizes give as good bloom as the largest sizes under the average conditions, because they are less apt to send up more than the one spike, thus concentrating all the strength of the bulb and plant in the one bloom spike. For indoor forcing, of course, the largest sizes are the best. The ideal is to have one spike, or at the most two, from each bulb in the largest possible sizes, and those varieties that show too much tendency to divide are not favored.

For convenience all commercial growers are using the six standard sizes, with the smallest under a half inch in diameter, and the largest over one and one half inches, with four sizes in between.

Growers are naturally interested in obtaining the greatest increase of bulblets. The smaller sizes are the best for this purpose. The bulblet increase from bulblet-grown bulbs are the best of all, as such bulblets sprout readily. The biggest crop of easy-sprouting bulblets is obtained from a bulblet-grown bulb that attains large size. A fine crop of bulblets is also obtained from a planted small bulb that attains large size without sending up a bloom spike.

Most people are interested primarily in obtaining the best possible spike of bloom. But at the same time they would like to have quite a few bulblets. The surest way on the average is to plant the medium sizes, No. 3 and No. 4.

YOUNG AND OLD

From a planting of bulblets the crop of bulbs at digging time usually consists of small bulbs under a half inch in diameter. Very few attain a larger size in most varieties, except under the most favorable conditions. In the second season of growth most of these small bulbs will attain large size, and it is here that we have our bulbs at their best possible age for the production of the finest possible flowers. After this season they are never quite so good, though of course they renew themselves from year to year.

Such bulbs the second season from the bulblet are known as young bulbs, and those commercial growers are wise that send out no other.

A high-crowned bulb has a vertical diameter almost as great as its horizontal diameter. As the bulb becomes old it flattens out. The size of the scar on the under side is also a good indication of age. A dark colored thin papery husk is also a symptom of old age in a bulb. Sometimes they become so senile that their husks all drop off. A young bulb has a fresh, firm, meaty appearance.

BULBLETS ARE STUBBORN

A bulblet's disinclination to sprout is Nature's way of preserving the species. Nature plans to leave a few unsprouted in the ground, so that in case of some calamity that utterly destroys all growth above ground these dormant bulbs are left to renew its kind. That is why a planting of bulblets will never all grow.

This tendency of the bulblets to remain dormant as a safety measure is also noticed when a stock of bulbs changes from one climate to another. I have in many instances harvested a fine crop of bulblets from a planting of imported small bulbs, only to have an extremely poor sprout from them the following season. The shock of the sudden change of climate seems to arouse their suspicions, warning them to be careful about showing growth too soon. In most of these instances, however, as soon as the surprise has worn off, it is remarkable how well they have since been doing.

After a Glad has become used to the growing conditions most of the bulblets will sprout readily provided moisture reaches the heart of the bulblet. The hard shell, or husk, was devised to protect its heart and life during the long rainless period during which the Glad lies dormant in the ground in its native country.

HOW TO SPROUT BULBLETS

The usual method to get moisture to the bulblet kernel is to soak them in water for a day or more just before planting. This hastens the germination, although they would do just as well if they were planted directly without moistening provided they were assured of plenty of moisture in the ground. Early plantings are best, as they get the early spring rains that do not dry away so quickly. Those who irrigate sometimes use a mulch to retain moisture as an aid to sprouting.

Bulblets may be kept in wet saw-dust for awhile just before planting. But be sure to plant when the shoots first begin to show, to avoid breaking them off in handling. The ones not showing a sprout or roots are in a better mood because of the moisture, and will come along after they are in the ground. Of course, there are always those that will not grow the first year in any case.

The method that is the most successful is to loosen the husk a little, just enough for the moisture to penetrate readily. You may use the sharp point of a pen-knife, and tear a sliver down one side of the bulblet. Better do it under a large hand-glass to ease the eyes. Even this method will not prevail if the bulblet is too sleepy, and I have often dug up peeled bulblets in the fall for another trial next spring.

My method is to hand-peel the high priced, the new and the rare, and for the cheaper commercial kinds to leave the bulblets for two or three days in the barrel in which they were placed for the disinfecting solution of corrosive sublimate.

CONFLICTING PURPOSES

In the following directions for the growing of Glads we must keep in mind that there are two different and distinct purposes for which Glads are grown. These two objectives are in conflict in many ways. If we point for the bloom we are sure to sacrifice the bulb, and the reverse is just as true.

The florist who would produce the finest bloom should discard the used bulbs, and the commercial bulb grower who would put the most into his bulb should let the cut-flower end of his business be only incidental, if at all.

HIGH FEEDING PRESSURE

Glads are great feeders, no doubt of it. Very few plants will respond so readily to the use of oceans of fertilizers of most any kind, provided certain precautions are observed, such as using plenty of water and not making direct contact with the bulb.

It has been suggested that the following formula be used: nitrogen for plant growth, phosphate for the flower, and potash for the bulb. But whether the Glad makes any such distinction I do not know. Any good commercial fertilizer contains these necessary elements, and we all know that the response on the part of the Glad is about the same in all cases, namely, a greatly increased growth of the plant and magnificent bloom. The finest bloom in my experience has been from the use of barn-yard manure, and probably commercial sheep manure is as good as any for the average soil. Most growers claim that any good potato fertilizer is excellent for Glads.

PENALTIES OF OVER-EATING

But it has been my experience that the forcing of the growth of the plant and flower by the use of any fertilizer is at the expense of the bulb. Most of the effort on the part of the whole plant has gone towards the growth above ground to the comparative neglect of the part beneath. Nature's purpose for a well-balanced development of the whole plant has been diverted towards the one thing only, the bloom.

You have perhaps noticed in your own garden that when you have had a particularly splendid specimen of bloom of a favorite variety, you were disappointed at digging time with the measly worthless-looking bulb you found. Those dirty-looking, bald-headed, flat, dejected-looking bulbs, that you planted so young and vigorous, have simply become exhausted, and are dying of old age, and not much can now be done to rejuvenate them. The proper procedure would be a private funeral.

Never use any fertilizer of any kind in the production of high-quality bulbs. It is not Nature's way. We cannot change Nature's ways, however much we may improve things in the direction she points out. The average soil contains all the elements needed for the natural development of the bulb.

PRESERVATION OF THE SPECIES

Nature's whole concern is in the preservation of the species. She is reckless with the individual. The destruction of an individual—whether man, plant, or animal—is nothing to her, because provision has already been made for the perpetuation of its kind.

It is Nature's plan to store up strength in that bulb, to carry it safely over the dormant period. Where she is put to it in order to preserve a species, she redoubles her effort in that direction. Where a plant has to work for what it gets, it naturally bends its greatest effort towards preserving its kind. In the Glad this is done through the bulb and bulblets. That is why the finest and peppiest bulbs, and the enormous quantities of bulblets, are found where conditions are somewhat adverse with regard to plant food and moisture. If you would have lots of bulblets do not feed your plants too much.

Any farmer will tell you that his breeding stock of domestic animals must not be kept too fat, as it would be disastrous. The rustlers make the best breeders.

Of course, there are extremes in all things. You need not starve your bulbs to death. Moderate moisture and a well-balanced diet are essential. Not all Glads will respond readily to high feeding pressure, while some varieties make a fine bulb and a fine increase no matter how much you feed them.

WHEN TO PLANT

Plant as early in the spring as the condition of the soil will permit, if there is not much danger of freezing down to the bulb. In this way you may have bloom before the heat of the summer overtakes them. Plantings the latter part of June and the first week of July in the latitude of Iowa will avoid the August heat.

For a succession of bloom plant at intervals of about two weeks, if you have large bulbs. The best way to have a continuous season of bloom is to plant all the different sizes at the same time in the early spring, and to plant plenty of them. The larger bulbs bloom first, while the No. 6 sizes come last of all. Even bulblets are often in bloom along towards frost time.

If you save your bulblets at digging time, and plant them when you plant your large bulbs by sprinkling them in the same trench, you will have a supply of all the different sizes.

WHERE TO PLANT

Plant your Glads out in the open, away from things. They like plenty of elbow room. They detest shade, liking the sunlight for as much of the day as possible. Avoid the vicinity of trees like you would his Satanic Majesty. Planted where you would plant your sweet corn or cabbage, your Glads are sure to bloom:

Any kind of soil will do if it has plant food. But it must be well drained.

HOW TO PLANT

Bulbs should be planted at least two inches apart in the row for the best growth. Farther apart is not at all necessary.

The nature of your soil will determine the depth. They should be deep enough to be sure of obtaining whatever moisture is available during the growing season, being somewhat deeper in loose sandy soil than in the clay loams. About three inches is proper for the latter. If you would keep the spikes from falling over at blooming time, you might go to the trouble of planting to a depth of six inches or more. But I would prefer using stakes, like the small bamboo canes used by florists. For commercial growers, of course, the shallow plantings are more economical.

Plant single file, as it is so much easier to use garden tools for cultivating close up to the plant on each side of the row, and the hand-weeding is reduced to a minimum. In mass planting there are more weeds to pull, and the surface of the soil cannot be kept loose.

The space between rows depends on your means of cultivating, but should be at least eighteen inches. If your symptoms of Gladitis are very pronounced, and there is danger of much trampling of the soil between the rows, then I would advise putting them farther apart.

ECONOMY IN WEED CONTROL

Glads are much slower coming up than the weeds. I use this opportunity to destroy one whole crop of weeds. There is a tool on the market somewhat resembling a lawn-mower and called a mulcher. It has revolving blades, and a knife that passes just beneath the surface of the soil. Just before the Glad shoots are ready to pierce the surface I go over the top of the row with this mulcher, and entirely destroy the weeds that are up. If I occasionally nip the end of a spike, there is no damage done. It will push through. Then after the Glads are up two or three inches, I again use the mulcher, this time as near to the plants on each side of the row as I can pass the blade. This gets another crop of weeds for the most part, leaving only the ones between the Glads. Some growers use a tool resembling a pitch-fork to rake these weeds out of the row. By these various devices hand-weeding is reduced to a minimum.

CULTIVATING

I regard the dust mulch as very essential. It keeps the ground from "baking." The soil is kept loose so that plenty of air may reach the root system. It also helps preserve moisture. Of course, some soils do not get hard, in which case no cultivation is necessary. Breaking the crust after every rain is a big aid to proper growth. Do not cultivate too deeply, as there is danger of injuring the root system.

Weeds are by far the greatest enemy to the proper growth of any plant. They take up the moisture and the available plant food. Keep the weeds away.

DIGGING

Dig your bulbs before the stems die. Dig them just as soon as you notice the leaves and stems turning brown, even if you have to do it sooner than you would like. After they have finished their growth,

they will keep much better if they are cured and dry and stored away, than they would out in the ground.

Remove the stems as soon as they are lifted from the ground, using a pruning shears. You might damage the husk and spoil its looks if you tried to break its neck with the bare hands. If your soil contains clay, washing the bulbs will improve their looks. I use a barrel churn and much water.

CURING AND STORING

You need not spread your bulbs out in the sun to cure. A bulb that is cured too fast becomes soft in the process, almost as if it had been frozen. Of course, it hardens again as the curing is completed, but it surely is somewhat of a shock. Place your bulbs in a dry airy place, either in shallow trays or, for smaller quantities, in paper bags. Keep from freezing and too much light, and they will be "rarin to go" in the spring.

The dried-up old bulb may be taken off most readily after they have been dug about a month. After that they become attached very tightly to the new bulb, and are removed with difficulty and danger of injury to the bulb. The dirt and roots should also be removed, and the bulblets separated.

The bulblets should not be allowed to become too dry, as it will hinder their sprouting. Keep them in a cool tight place, being careful they do not mold.

QUITE SHOCKING

Sometimes bulbs will send up very little or no growth above ground, and at digging time you will find only small knobby bulbs formed on the top of the old bulb. This is perhaps due to some shock which the old bulb has received before planting, such as being kept for a day or so in a refrigerator to check the signs of sprouting in the spring, or the too rapid curing of the bulbs after digging in the fall by exposure to the hot sun or other sources of heat. A freeze that is just short of killing the bulb is a serious shock. Bulbs with long sprouts on them in the storage room in the spring should be planted immediately upon removal, or they will behave in the same way. As a remedy, avoid freezing temperatures, long sprouts, or any sudden changes, and cure your bulbs slowly. This phenomenon is explained by the fact that any unusual change in environment will cause the bulb to pass into dormancy as quickly as possible.

DISEASES

Glad do have diseases, and these diseases can be cured by destroying the germ, or spore, just like any other disease. There are several different kinds, each of which is caused by a specific germ, or spore, that does not work on any other plant. These germs are not prevalent everywhere, nor so far as known do they have "hosts" in other plants or in the soil, such as the barberry bush for the black rust of wheat, for example.

The presence of disease may be determined by the black or brown spots or patches on the surface of the bulb, which during storage may reduce the entire bulb to a mummy. Chemicals will not penetrate to the heart of these diseased areas. The only cure that is at all certain is to remove these patches with a knife from both the surface and the heart of the bulb, and to treat the remainder of the bulb with some chemical like corrosive sublimate. I use a large hand glass to be sure of removing every vestige of diseased area.

These disease germs will remain alive for several years in the soil where diseased bulbs were grown. So you must plant all treated bulbs on new ground each year. Disease-free bulbs that become infected after they are planted will bloom as well as any, but the bulbs will be useless for the following season. Disease need not bother you

if you have a source of supply of disease-free bulbs for each planting.

My formula for the use of corrosive sublimate is a solution of one ounce of the powder to about five gallons of water. Dissolve the powder in a little hot water first. Do not use a solution for more than one batch of bulbs. Twenty-four to thirty-six hours soaking will suffice. Use wood or earthen-ware containers. This chemical in a few hours loses its strength in solution, and it will quickly eat into metals.

Do not mistake abrasures, scars, grub bites, wire-worm nicks, and so forth, for disease. Glad diseases are a rot that destroys the bulb.

DO GLADS RUN OUT?

The question is quite frequently asked: do Glads run out, or all change to one color? Most emphatically they do not. The bulblets, except in the case of sports, are absolutely true in color to the mother bulb for generation after generation indefinitely.

If, for example, several years ago you planted a mixture of several different colors, and saved the increase year after year, you will notice that this stock of Glads gradually became narrowed down to only one, or perhaps only a few, of the original colors. The reason is easily explained. Some varieties, especially the Prims, are very much stronger growers than others, multiplying by division very rapidly, while others do not divide, and do not set bulblets, and die of old age in a year or so, the result being that the one strong Glad gets out of all proportion to what it was at the start.

SPORTS

Sometimes, among tens of thousands of blooms of a variety, you will find one that is of a different color, and is evidently not a rogue. It has all the characteristics of plant and growth and markings, and so forth, of the variety itself, but the color has changed. This is called a color sport. Other features sport too. For example, I had some beautiful double Evelyn Kirtlands a few years ago, but they reverted back in the following season. Most color sports revert back, also. But when they do remain fixed, sometimes we have a beautiful new variety. Red Glory is a splendid example. Marmora and Wilbrinck are fine sports. I have a beautiful lilac sport of Sweet Rose which I am propagating, also a fine pure white sport of Capt. Boynton with the same feather blotch.

STRANGE AS IT MAY SEEM

The bloom of a Glad is so delicate and clear, the shadings and tintings almost ethereal, that it is almost paradoxical to associate this flower with the dryness of air, the blistering sun-rays, and the dusty hard ground of middle summer. Other flowers at this season, to shield themselves from such trying conditions, have a sort of blurred, weedy appearance, a sort of coat of tan, as it were. None so sparkling clear as the Glad at this time of the year. As a summer flower the Glad stands supreme. Easy to raise, practically certain to bloom, showing a riot of color of all imaginable kinds, with an intermingling of brilliancy and delicacy unsurpassed, adaptable to all kinds of floral uses, with unusually great keeping and lasting qualities, Glads have a great future, because they so admirably fill the gap in the summer flowering season.

AIDS TO BEAUTY

The excuse for the existence of any flower is the beauty it expresses. Glads are admirably formed for the presenting of this beauty to the best advantage. Of course, Glads have their faults in this respect, but the ideal Glad spike stands erect, so that one can look directly into their bright faces and obtain the full effect of their

beauty. The stems are stiff, slender and wiry, and stretchy and graceful, not short, thick and dumpy, nor crooked and flimsy. The combined effect of several open florets is at its best when they all face one way, are reasonably well opened, spaced neither too closely together nor too scattering, and are placed with regularity along the stem. The enjoyment of their beauty lasts longer if the florets open up only a few at a time, say four to six, on a spike with twelve to twenty buds, and if they do not fade after they are cut, having good substance, and losing little in size and form and beauty of color. Beauty of color is enhanced by beauty of form, and therefore the florets should be well opened, but not too flat, the petals rounded and reasonably broad rather than angular, maintaining harmonious proportions between length and width for the petal, the flower, and the flower cluster. Gorgeousness increases with size provided harmony is maintained throughout in petal, floret, and cluster, with the substance heavy enough to prevent flopping, and the stem strong enough to prevent drooping.

BEAUTY NO LONGER A LUXURY

If efficiency be the modern watchword, then beauty seems to be its ideal, as beauty is interwoven into the fabric of nearly everything we use or enjoy. Beauty has a great sales value for any commodity. People are demanding more beauty in everything pertaining to their lives. It is becoming a necessity rather than a luxury. Glads in your home will not be a wasteful extravagance. Plant quantities of medium or small bulbs, and make your home beautiful. Cut them as fast as they bloom, and place them everywhere, right where folks can see them, wherever they must spend their time, in the office or in the kitchen, the work-room or the sick-room, or in the church. Bring them indoors. The bugs and birds do not appreciate them out there in the garden. Many a bloom has blushed unseen and wasted its sweetness on the desert air out there. Because of their great keeping and lasting qualities you lose nothing by bringing them in.

For best results change the water daily, remove the wilted blossoms, cut off a thin slice slantwise from the lower end of the spike, and keep out of air currents. In cutting leave at least four or five leaves on the plant to develop the new bulb, if you care to save it.

BOTANY OF GLADS

The Glad belongs to the Iris family, which contains more than thirty genera, including the Iris, Crocus, Ixia, Freesia, and Watsonia. In the genus *Gladiolus* there are about one hundred and fifty species, with an extremely wide range of variation in the bulbs, in the size and form of plant, in habits of growth, and in the colors.

THE FIRST HYBRIDS

There are fifteen species of *Gladiolus* in Southern Europe, Asia Minor, and Persia, but only a few of these have been cultivated. The French and Italian corn flags, of a purple color, were commonly found in the grain fields of these two countries, sometimes in their meadows. And they were also grown in English gardens as early as the sixteenth century. But no effort was made to improve them. They were not held in any great esteem, and were used only because they bloomed at a season when other flowers were scarce.

It was when the South African species from the Cape of Good Hope were brought to Europe that the first impetus was given to *Gladiolus* improvement. The species "blandus," a white tinged red, and "cardinalis," a bright scarlet, and "floribundus," a pinkish white, were among the first ones introduced, and they were brought to Europe during the latter decade of the eighteenth century. Glads being easy to cross-fertilize, soon a number of new forms began to ap-

pear. But the first important hybrid was *Gladiolus* "Colvillei," raised in 1823 at Colville's Nurseries, Chelsea, England. It was a seedling of the species "tristis," a yellowish white flushed purple, fertilized by pollen from "cardinalis." The flower was a bright scarlet with a white blotch. During the next twenty years a number of hybrids were obtained, but the real starting point of the modern garden *Gladiolus* came with the introduction in 1841 by Louis van Houtte of the *Gladiolus* "gandevensis," with several varieties, the most famous being *Brenchleyensis*, a bright red with a yellow blotch. This strain created quite an interest in the *Gladiolus*, and from this time on the plant steadily grew in popular favor. Following van Houtte there were many breeders in England, France, and Germany, the most famous being Kelway, Lemoine, and Leichtlin. Leichtlin's seedlings, later called the Childsii strain, were brought to America, and became the foundation stock of most of the fine varieties introduced by American originators.

The species "primulinus," recently discovered, has not only added much in the way of pure yellow colors and blendings of yellow, but also lent much improvement in form and grace, and especially in the length and stretch of the spike.

THIS MATTER OF PRICES

The prices asked for Glad bulbs, above a certain minimum, are based on the supply, or scarcity, rather than the cost of production. This is the reason for the gradual drop in prices for the different varieties from year to year.

When a new variety is outstanding, and the stock of it is scarce, a high price is justified. But in order to maintain for any length of time a high price level it must be good enough and distinctive enough to keep on growing in popular esteem and to fill in an ever increasing degree its own distinctive place in the realm of Glads.

WHERE TOO MANY IS TOO MUCH

Very few new Glads are distinctive enough to become standard. And when new ones are sent out in battalions and regiments, what can one do but give them all up in despair? Time and space and money have very defined limits for the average gardener, who obviously cannot try them all out. Being restricted as to choice he naturally wants only the best. And where will he turn in order to find out what are the best? The best reliance he has is the reputation of a variety, which is only too often artificially built up through extensive advertising free or otherwise.

It would be a big help if growers would not let their lists become too bulky. To the ordinary back-yard flower grower some lists look like the city directory, and have as little meaning.

SUN BATHING

The action of the sun's rays on the human skin produces a coat of tan, which has a certain health value. The effect of these same rays on a Glad bulblet seems to be to awaken it out of its dormancy. I placed a try of bulblets of a variety that is usually very hard to sprout out on the lawn in the full sunlight for about a month just before planting. These were given the usual soaking in water, and planted, together with a check lot of bulblets of the same variety. The results were astonishing. The sun bathers came up fully one thousand per cent stronger in numbers than their more modest brethren.

GLADS TRAVEL WELL

The following is taken from a Danville, Pa., newspaper:

"A box containing a dozen and a half *gladiolus*, which were to be exhibited at the Fourth Annual Flower Show of the Danville Floral Society, were received by William R. Snively yesterday (Friday). They

came from Foss Heaton, of Creston, Iowa. Mr. Heaton was ignorant of the fact that the show had been postponed, and sent the flowers for exhibit in the commercial class. They came by express and were in perfect condition when received by Mr. Snively. They had been shipped on Wednesday.

"The flowers would doubtless have won a prize at the show, being among the most beautiful *Gladiolus* ever seen in Danville. They are the 'Mr. W. H. Phipps' variety and are known among *gladiolus* growers as 'the wonder Glad.' Each of the spikes received contained approximately twenty large blooms of a radiant salmon pink color."

I might explain that these spikes were cut in the early morning with the first one or two blooms about half open, and given a drink of water immediately for about two hours. They were then packed in an ordinary florist's shipping box lined heavily with newspaper. The spikes were carefully arranged closely together on a heavy cushion of crumpled tissue-paper, with wads of this paper placed in all open spaces to keep the flowers from jostling each other. A quantity of wet sphagnum moss was wrapped around the lower ends of the spikes inclosed in a newspaper.

A HOT WEATHER YARN

On a day in early August I was cleaning out some stray weeds in a few rows of *Marmora* bulblets. It seemed rather warm along towards noon, and I decided it would be more comfortable writing notes up in the shade than sitting on a straw mat on that hot ground. Then I got curious and got out my old reliable thermometer, and placed it on that particular place next to the dirt where I had been sitting and sweating and picking weeds, and I stood watching the mercury climb. The longer I watched the higher it climbed. On and on it went, and when it got up to 124 degrees, with very little more to go without breaking the tube, I stuck it into my pocket and made for the shade again. First impressions were that I was witnessing the budding of an American edition of the Italian *Vesuvius*, but later observations reassured me. In accordance with the peculiar psychology of hot weather I felt still more uncomfortable, and this feeling was further enhanced when I read in the evening paper that official readings for the day ranged well above the 100 degree mark, with one Iowa station at 113 degrees.

The above has passed the censor as the truth. It speaks well for Glads that they can stand this racket so well.

GLAD BREEDING

It goes without saying that to win success in any line of breeding one must have definite ends in view and definite ideals in mind. This fact is no less true in Glad breeding.

Each variety is just one step in the process of breeding, and successful breeding depends on the proper selections of the individuals to be mated. If one is to make progress towards his ideal he must know the possibilities and characteristics of each variety he uses.

This matter of Glad hybridizing is not such a haphazard thing as some folks would have us believe. Of course, a great deal depends on being able to recognize a superior variety when one does get it from among thousands of attractive things. But the secret of most of our world-famous Glads goes back farther than that. The originator knew enough about their ancestry to have a pretty good idea about what was coming. The element of luck enters into the matter, but it is far from being the determining factor.

One must know what each variety will do. For example, I have found that Jane Addams impresses its characteristics very strikingly on its offspring. That white throat blotch is about as dominant a trait as the white face in the Hereford breed of cattle. Its great keeping and lasting qualities are very noticeable in its seedlings. The fine tips in a basket of seedlings that have been cut for some time are al-

most sure to be from Jane Addams seedlings. The size carries over very fine, too, but the color does not, as they are not lavender, but various shades of pink and cream. I have discovered quite a few others that are splendid breeders. I have also found many that do not breed on. They are neutral when it comes to breeding value, failing to make any definite impression on their offspring. As in all other lines of breeding among plants and animals, the strikingly outstanding individuals are likely to prove the best producers.

This means, for example, that if you want to produce a superior yellow you have good chances for success if you will try out the best yellows you know of. Other colors are not likely to give you what you want in yellow. If it is a large pure yellow you want, principles of breeding call for the use of the largest and truest yellows you can find, and if you succeed in getting a seedling nearer your ideal, use it as a stepping stone to further progress. Proof that breed improvement activities are open to everybody is in the fact that these stepping stones are sure to be found in commerce in a short time, the world being eager for any new varieties that are better than the ones we have.

CROSSING OF GLADS

I do not have much luck trying to get seed to set in the hottest part of the summer, but I have splendid results the last week of August and the first half of September. There should be three or four weeks allowed for the maturing of the seed pods before frost.

The pollen should be as fresh as possible. If I have plenty of spikes of the pollen parent, I gather them in the early morning, and apply the pollen as soon as the flowers are fully opened. Taking them indoors the evening before will preserve the pollen from the wind and insects.

The pollen is best applied by brushing the stamens directly against the pistil, as the results are more certain. Glads are too much of a hybrid to expect perfect results in very many cases, even if the application is very liberal and repeated the following day.

You may ascertain the breeding qualities of the different varieties used, and also the character of the results for the various combinations, if a record is kept. Learning what crosses are promising, as well as what ones are poor, saves time and effort.

The seed should be planted shallow, early in the spring, kept moist at all times, and protected from too much sunlight by lath frames, in good rich soil that will make nice plump bulbs by digging time. It is best to have as many as possible bloom the next year, so that if any are good the bulblet increase may be saved.

BEST 25 FOR 1930

The past season was a scorcher. Under such conditions perhaps my choice of the twenty-five best performers and most beautiful Glads of the year would imply more than for the average season. The following are my best, given somewhat in their order of preference: Mr. W. H. Phipps, Dr. F. E. Bennett, Mrs. Leon Douglas, Betty Nuthall, Mammoth White, Golden Dream, Marmora, Jane Addams, Orange Wonder, Veilchenblau, Minuet, Dr. Nelson Shook, Mrs. F. C. Peters, Red Glory, La Paloma, Geraldine Farrar, Paul Pfitzer, Coryphee, Sweet Rose, Catherine Coleman, Pfitzer's Triumph, Berty Snow, Albatros, Salbach's Orchid, and Gloriana.

“Perfume of the flowers for gladness,
Song of the birds for mirth;
One is nearer to God’s heart in a garden
Than any place else on earth.”

Dorothy Francis Gurney

The most remarkable thing about a Glad is the fact that a spike that is cut when a bud is entirely sheathed from sight will unfold this bud into a beautiful bloom nearly a week later with little or no loss in quality.

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